

ABSTRACT OF THE DISCLOSURE

Object: To broaden the range of photographing of object, until illumination of 0.02 lux.

Construction: In the case of sufficient bright object, photographing is performed by a conventional circuit at a high S/N ratio, at a high degree. In the case of an insufficient bright object, inserting auxiliary amplifying circuit m , m_1 , m_2 or em and ignoring the S/N ratio, and raising the amplification degree. In the case of sufficient bright object, photographing is performed by high S/N ratio, and high degree, in the case of insufficient bright object, an auxiliary amplifying circuit m , m_1 , m_2 or em is inserted ignoring the S/N ratio until utility noise composite of 20dB (10%).